Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Displacement and Distance

Draw a scale diagram (include the resultant vector) to illustrate each of the following situations, and then calculate both the total distance and displacement.

|  |  |  |  |
| --- | --- | --- | --- |
| Situation | Diagram | Distance | Displacement |
| David walks 3 km north, then turns and walks 4 km east. |  |  |  |
| Hannah crawls 4 feet then turns 90 degrees and crawls 6 feet |  |  |  |
| Ray runs 30 feet north, then 30 feet west, and finally 30 feet south |  |  |  |
| Melanie walks 1 mile then turns 90 degrees and walks 2 miles |  |  |  |
| Jeremy walks two miles from his door to the park, then returns home to his door |  |  |  |
| Stacie swam 3 complete laps in a 50 meter pool. ( 1 lap is to the other side and back) |  |  |  |
| Helen drives 7 miles east, 4 miles west |  |  |  |